VOLUME XIV

AUTHOR INDEX

Papers and Technical Notes

Short papers and notes are marked (N) in this index

Author	*Title*	*Page*
ASCHER, MARCIA	Explicit solutions of the one-dimensional heat equation for a composite wall	346
BAUER, F. L.	The formula-controlled logical computer "Stanislaus"	64
BOERSMA, J.	Computation of Fresnel integrals	380
BRILLHART, JOHN & JOHNSON, G. D.	On the factors of certain Mersenne numbers	365
COMÉT, STIG	Improved methods to calculate the characters of the symmetric group	104
DEMPSEY, E. & BENSON, G. C.	Asymptotic expansion of the modified Bessel function of the second kind	362
FETTIS, HENRY E.	Note on $\int_0^\infty e^{-x} J_0\left(\frac{nx}{\xi}\right) J_1\left(\frac{x}{\xi}\right) x^{-1} dx$	372
FIELDER, DANIEL C.	Tabulation of coefficients for operations on Taylor series	339
FLOYD, ROBERT W.	A note on rational approximation	72
GILLIS, JOSEPH & WEISS, GEORGE	Products of Laguerre polynomials	60
GLODEN, A.	Note on factors of $n^4 + 1$	278
GOLDBERG, MICHAEL	Rotors in polygons and polyhedra	229
GREENBERG, IRWIN	The evaluation of certain probability integrals	376
HAMMER, PRESTON C. & WICKE, HOWARD H.	Quadrature formulas involving derivatives of the integrand	3
HARUMI, KASABURO, KATSURA, SHIGETOSHI, & WRENCH, JOHN W., JR.	Values of $\frac{2}{\pi}\int_0^\infty \left(\frac{\sin t}{t}\right)^n dt$	379
ISEMANGER, K. R.	The complete factorization of $2^{128} + 1$ (N)	73
KILLGROVE, RAYMOND B.	A note on the nonexistence of certain projective planes of order nine (N)	70
KIRKPATRICK, EDWARD T.	Tables of values of the modified Mathieu functions	118
KRAVITZ, SIDNEY	The congruence $2^{p-1} \equiv 1 \pmod{p^2}$ for $p < 100{,}000$ (N)	378
LANG, H. A. & STEVENS, D. F.	On the evaluation of certain complex elliptic integrals (N)	195
LEHMAN, R. SHERMAN	On Liouville's function	311
LING, CHIH-BING	Evaluation at half periods of Weierstrass' elliptic function with rectangular primitive period-parallelogram (N)	67
LONGMAN, I. M.	A method for the numerical evaluation of finite integrals of oscillatory functions	53
LONGMAN, I. M	On the utility of Newton's method for computing complex roots of equations (N)	187
LORD, R. D.	Integrals of products of Laguerre polynomials (N)	375
LOWAN, ARNOLD, N.	On the propagation of round-off errors in the numerical integration of the heat equation	139
LOWAN, ARNOLD N.	On the propagation of round-off errors in the numerical treatment of the wave equation	223

Author	*Title*	*Page*
LOWAN, ARNOLD N.	On the numerical treatment of heat conduction problems with mixed boundary conditions (N)	266
LOWAN, ARNOLD N.	On the propagation of errors in the inversion of certain tridiagonal matrices	333
MAGULA, D. A.	A conjugate factor method for the solution of a cubic (N)	281
MILLER, J. C. P.	Numerical quadrature over a rectangular domain in two or more dimensions, Part I	13
MILLER, J. C. P.	Numerical quadrature over a rectangular domain in two or more dimensions, Part II	130
MILLER, J. C. P.	Numerical quadrature over a rectangular domain in two or more dimensions, Part III	240
NIKOLAI, PAUL J.	Permanents of incidence matrices (N)	262
PALL, GORDON & SEIDEN, ESTHER	A problem in abelian groups, with application to the transposition of a matrix on an electronic computer (N)	189
PERLIN, I. E. & GARRETT, JAMES R.	High precision calculation of arcsin x, arccos x, and arctan x. (N)	270
POPE, DAVID A.	A method of "Alternating Corrections" for the numerical solution of two-point boundary value problems	354
RABINOWITZ, PHILIP	Abscissas and weights for lobatto quadrature of high order	47
RADOK, J. R. M.	Transcendental equation for the Schrödinger equation (N)	276
ROSE, MILTON E.	A method for calculating solutions of parabolic equations with a free boundary	249
ROTENBERG, A.	The calculation of Toroidal harmonics (N)	274
SALZER, HERBERT E.	Alternative formulas for osculatory and hyperosculatory inverse interpolation	257
SALZER, HERBERT E.	A note on the solution of quartic equations (N)	279
SCHEFFLER, D. & ONDREJKA, R.	On the numerical evaluation of the 18th perfect number (N)	199
SHANKS, DANIEL	A note on Gaussian twin primes (N)	201
SHANKS, DANIEL	On the conjecture of Hardy & Littlewood concerning the number of primes of the form $n^2 + a$	321
STROUD, A. H.	Numerical integration formulas of degree two	21
STRUBLE, GEORGE	Tables for use in quadrature formulas involving derivatives of the integrand	8
SWIFT, J. D.	Construction of Galois fields of characteristic two and irreducible polynomials	99
WALMSLEY, CHARLES & GRANT, ARTHUR S. G.	The Fourier transform of $[c^{2k} + (x - x^{-1})^{2k}]^{-1}$ arising from study of tuned circuit spectra (N)	193
WALTON, THOMAS S. & POLACHEK, HARRY	Calculation of the transient motion of submerged cables	27
WRENCH, JOHN W., JR.	Further evaluation of Khintchine's constant (N)	370
WYNN, P.	The rational approximation of functions which are formally defined by a power series expansion	147

INDEX OF REVIEWS BY AUTHOR OF WORK REVIEWED

Author	*Review Number*	*Table Classification*	*Page*
AGARWALA, S. P.	60	[K]	298
ALT, FRANZ L.	25	[Z]	91
ARBENZ, KURT	68	[X]	307
ARMOUR RESEARCH FOUNDATION	34	[P, W]	210
ARROW, KENNETH J.	21	[W]	89

Author	*Review Number*	*Table Classification*	*Page*
Ashby, Val J.	35	[S]	211
Bartholomew, G. A.	17	[S]	86
Barton, D. E.	73	[K]	384
Berkson, Joseph	44	[K]	285
Berndt, G. D.	74	[K]	385
Bhattacharya, Nikhilesh	85	[K]	390
Birkhoff, Garrett	94	[Q, S]	395
Bivins, R.	71	[G]	382
Bross, I. D. J.	45	[K]	286
Cashwell, E. D.	62	[K, X, Z]	299
Catron, Henry C.	35	[S]	211
Centre National D'Études des Télé-communications	63	[L]	300
Chakraborty, P. N.	60	[K]	298
Chernoff, Herman	75	[K]	385
Chistova, E. A.	7	[L]	79
Chistova, E. A.	32	[L]	208
Clark, F. E.	46	[K]	286
Clatworthy, W. H.	47	[K]	287
Culbertson, James T.	26	[Z]	93
David, F. N.	73	[K]	384
Dennis, Jack Bonnell	97	[Z]	398
Department of the Army	27	[Z]	94
Dixon, W. J.	48	[K]	287
Dodge, H. F.	49	[K]	288
Doornbos, R.	76	[K]	386
Drane, C. J., Jr.	11	[L, M]	82
Dunnett, Charles W.	6	[K]	79
Dunnett, C. W.	50	[K]	290
Emersleben, Otto	8	[L]	80
Epstein, L. Ivan	37	[X]	212
Everett, C. J.	62	[K, X, Z]	299
Ferguson, Robert O.	67	[W, X]	305
Fieller, E. C.	51	[K]	291
Foster, F. G.	77	[K]	386
Freudenthal, H.	40	[Z]	216
Frevel, L. K.	2	[D, L]	76
Gantmacher, F. R.	43	[G, X]	284
Gardner, Martin	28	[Z]	95
Gawlik, H. J.	4	[H, M]	77
Gerbes, W. W.	11	[L, M]	82
Gerhauser, John M.	36	[S, T]	211
Glassner, Alvin	20	[T]	88
Gloden, A.	42	[F]	284
Goan, R. L.	91	[K]	393
Goodier, J. N.	23	[X]	89
Gradstein, I. S.	69	[A, J, L, M]	381
Greenberg, B. G.	58	[K]	297
Greenberg, B. G.	84	[K]	389
Hartley, H. O.	51	[K]	291
Hartree, D. R.	66	[S]	304
Hensman, R.	12	[L, M]	83
Hershey, A. V.	13	[L, M]	83
Hetz, W.	78	[K]	386

Author	Review Number	Table Classification	Page
HIGGS, L. A.	17	[S]	86
HODGE, P. G., JR.	23	[X]	89
HOES, M. R.	11	[L, M]	82
HORN, JAKOB	93	[M, X]	394
HORSNELL, G.	52	[K]	291
HOWELL, K. M.	3	[G]	76
HUITSON, A.	79	[K]	387
JEENEL, JOACHIM	41	[Z]	217
JENKINS, D. P.	12	[L, M]	83
JOHNSON, N. L.	53	[K]	292
KAMAT, A. R.	59	[K]	297
KANTOROVICH, L. V.	24	[X]	90
KARLIN, SAMUEL	21	[W]	89
KARMAZINA, L. N.	32	[L]	208
KARPOV, K. A.	14	[L, M]	84
KASTEN, E. L.	45	[K]	286
KATSURA, S.	15	[L, M, S]	84
KIMBRO, GENEVIEVE M.	72	[I]	384
KLINGER, H.	78	[K]	386
KRYLOV, V. I.	24	[X]	90
KULLBACK, SOLOMON	80	[K]	387
LAMM, R. A.	50	[K]	290
LANGDON, LYLE R.	39	[X, Z]	214
LANGER, R. E., Editor	94	[Q, S]	395
LANGER, RUDOLPH E., Editor	95	[X]	395
LEE, Tsai-Hwa	22	[W, Z]	89
LEHMANN, E. L.	31	[K]	207
LEVENS, ALEXANDER S.	38	[X]	213
LIEBERMAN, G. J.	81	[K]	388
LOWAN, A. N.	5	[I]	78
LOWELL, HERMAN H.	9	[L]	81
MCCRACKEN, DANIEL D.	22	[W, Z]	89
MATSEN, F. A.	36	[S, T]	211
MAXFIELD, J. E.	65	[L, M]	302
METROPOLIS, N.	71	[G]	382
MILLER, JAMES	36	[S, T]	211
MONK, D. T.	57	[K]	295
MOORE, P. G.	54	[K]	292
MORAN, P. A. P.	92	[K, P]	393
MOSES, LINCOLN E.	75	[K]	385
NBS, APPLIED MATHEMATICS SERIES No. 50	55	[K]	293
NIEVERGELT, E.	56	[K]	295
NIJGH, G. J.	1	[B, C, K, S]	75
NOMURA, Y.	15	[L, M, S]	84
NUMERICAL COMPUTATION BUREAU	10	[L]	81
OWEN, D. B.	57	[K]	295
OWEN, D. B.	82	[K]	388
OZAWA, MASARU	87	[K]	391
PAXTON, F. A.	33	[L]	209
PEARSON, E. S.	51	[K]	291
PETERSEN, D. R.	2	[D, L]	76
PRANGE, EUGENE	70	[G]	382
PRINS, H. J.	76	[K]	386

RAMACHANDRAN, K. V.	83	[K]	389
REYNOLDS, G. E.	11	[L, M]	82
REYNOLDS, GEORGE E.	29	[B]	204
ROBIN, LOUIS	64	[L]	301
ROLLIN, J. E.	33	[L]	209
ROMIG, H. G.	49	[K]	288
ROSE, M. E.	18	[S]	87
ROTENBERG, M.	71	[G]	382
RYSHIK, I. M.	69	[A, J, L, M]	381
SALZER, HERBERT E.	72	[I]	384
SARGENT, LAUREN F.	67	[W, X]	305
SARHAN, A. E.	58	[K]	297
SARHAN, A. E.	84	[K]	389
SATHE, Y. S.	59	[K]	297
SCARF, HERBERT	21	[W]	89
SEKAR, C. C.	60	[K]	298
SELFRIDGE, JOHN L.	30	[G]	204
SELFRIDGE, R. G.	65	[L, M]	302
SENGUPTA, J. M.	85	[K]	390
SHERMAN, B.	61	[K]	299
SIOTANI, MINORU	86	[K]	390
SIOTANI, MINORU	87	[K]	391
SOMERVILLE, P. N.	88	[K]	391
STECK, G. P.	89	[K]	391
TAGUTI, G.	90	[K]	392
TATE, R. F.	91	[K]	393
THORNE, CHARLES J.	16	[P]	85
TURLEY, J. W.	2	[D, L]	76
VAN LIESHOUT, R.	1	[B, C, K, S]	75
WAPSTRA, A. H.	1	[B, C, K, S]	75
WEISS, HAROLD	22	[W, Z]	89
WESTCOTT, C. H.	19	[S]	87
WILSON, WALTER L., JR.	96	[X]	398
WITTICH, HANS	93	[M, X]	394
WOOTEN, J. K., JR.	71	[G]	382

TABLE ERRATA

No.	*Author*	*Title*	*Page*
274	ARNDT, L.	Recherches sur le calcul des forces perturbatrices dans la théorie des perturbations séculaires	218
286	BURRAU, CARL	*Tafeln der Funktionen Cosinus und Sinus, etc.*	400
275	CAHEN, E.	*Théorie des Nombres*	218
284	CAMBI, E.	*Eleven and Fifteen-Place Tables of Bessel Fuctions of the First Kind, to all Significant Orders*	308
276	CHEBYSHEV, P. L.	*Teoria delle Congruenze*	218
277	DALE, J. B.	*Five-Figure Tables of Mathematical Functions comprising Tables of Logarithms, Powers of Numbers, Trigonometric, Elliptic, and other Transcendental Functions*	219
278	DWIGHT, H. B.	"Table of Bessel functions and derivatives J_2, J_1', J_2', N_2, N_1', N_2'"	219
287	FOWLE, F. E.	*Smithsonian Physical Tables*, 1st reprint, 8th rev. ed., 1934	400

No.	Author	Title	Page
288	HEAD, J. W. & WILSON, W. P.	*Laguerre Functions: Tables and Properties*	400
289	H. M. NAUTICAL ALMANAC OFFICE	*Interpolation and Allied Tables*	400
290	H. M. NAUTICAL ALMANAC OFFICE	*Subtabulation, A Companion Booklet to Interpolation and Allied Tables*	401
273	JAHNKE, E. & EMDE, F.	*Tables of Functions with Formulae and Curves*	96
276	KULIK, J. P.	"Über die Tafel primitiver Wurzeln"	218
285	MEYER ZUR CAPELLEN, W.	*Integraltafeln. Sammlung unbestimmter Integrale elementarer Funktionen*	308
291	MORSE, PHILIP M.	*Vibration and Sound*	401
279	RILEY, J. A. & BILLINGS, C.	"Gaussian quadrature of some integrals involving Airy functions"	219
292	ROBIN, LOUIS	*Tables Numériques des Functions Associées de Legendre*	401
293	RYSHIK, I. M. & GRADSTEIN, I. S.	*Summen-Produkt-und Integral-Tafeln: Tables of Series, Products, and Integrals*	401
280	SALZER, HERBERT E.	"Orthogonal polynomials arising in the numerical evaluation of inverse Laplace transforms"	220
294	SILBERSTEIN, L.	*Synopsis of Applicable Mathematics with Tables*	403
281	SPENCELEY, G. W. & SPENCELEY, R. M.	*Smithsonian Elliptic Functions Tables*, 1947	220
295	SPENCELEY & SPENCELEY	*Smithsonian Elliptic Functions Tables*, 1947	404
283	SPENCELEY, SPENCELEY & EPPERSON	*Smithsonian Logarithmic Tables to Base e and Base 10*, 1952	308
282	WATSON, G. N.	*A Treatise on the Theory of Bessel Functions*	221

NOTES

Title	Page
Mathematics of Computation	1
New Journals	309
Automatic Programming of Digital Computers—National Information Centre	309

CORRIGENDA

Author	Title	Page
FIELDER, D. C.	"A note on summation formulas of powers of roots"	97
HENSMAN, R. & JENKINS, D. P.	*Tables of* $\frac{2}{\sqrt{\pi}} e^{z^2} \int_z^\infty e^{-t^2} dt$ *for Complex z*	310
HER MAJESTY'S NAUTICAL ALMANAC OFFICE	*Subtabulation, A Companion Booklet to Interpolation and Allied Tables*	97
LING, CHIH-BING	"Tables of values of 16 integrals of algebraic-hyperbolic type"	222
PARKER, E. T. & NIKOLAI, PAUL J.	"A search for analogues of the Mathieu groups"	222
ROBIN, L.	Table Erratum, 261, *MTAC*, 1958	222

REVIEWS BY SUBJECT

A. Arithmetical Tables, Mathematical Constants

Author/s	Review Number	Title	Page
I. M. Ryshik & I. S. Gradstein	69	*Summen-, Produkt- und Integral-Tafeln: Tables of Series, Products, and Integrals*	381

B. Powers

George E. Reynolds	29	*A New Method of Cube Root Extraction on Desk Calculators*	204
A. H. Wapstra, G. J. Nijgh & R. van Lieshout	1	*Nuclear Spectroscopy Tables*	75

C. Logarithms

A. H. Wapstra, G. J. Nijgh & R. van Lieshout	1	*Nuclear Spectroscopy Tables*	75

D. Circular Functions

L. K. Frevel, J. W. Turley & D. R. Petersen	2	*Seven-Place Table of Iterated Sine*	76

F. Theory of Numbers

A. Gloden	42	*Table des Solutions de la Congruence* $x^4 + 1 \equiv 0 \pmod{p}$ *pour* $800\,000 \leqq p \leqq 1\,000\,000$	284

G. Higher Algebra

F. R. Gantmacher	43	*Applications of the Theory of Matrices*	284
K. M. Howell	3	*Revised Tables of 6j-Symbols*	76
Eugene Prange	70	*An Algorism for Factoring* $X^n - 1$ *over a Finite Field*	382
M. Rotenberg, R. Bivins, N. Metropolis, & J. K. Wooten, Jr.	71	*The* $3 - j$ *and* $6 - j$ *Symbols*	382
John L. Selfridge	30	*On Finite Semigroups*	204

H. Numerical Solutions of Equations

H. J. Gawlik	4	*Zeros of Legendre Polynomials of orders 2–64 and weight coefficients of Gauss quadrature formulae*	77

I. Finite Differences, Interpolation

A. N. Lowan	5	*The Operator Approach to Problems of Stability and Convergence of Solutions of Difference Equations and the Convergence of Various Iteration Procedures*	78
Herbert E. Salzer & Genevieve M. Kimbro	72	*Table for Bivariate Osculatory Interpolation Over a Cartesian Grid*	384

Author/s	Review Number	Title	Page
		J. Summation of Series	
I. M. Ryshik, & I. S. Gradstein	69	*Summen-, Produkt- und Integral-Tafeln: Tables of Series, Products, and Integrals*	381
		K. Statistics	
D. E. Barton & F. N. David	73	"A test for birth order effect"	384
Joseph Berkson	44	"Tables for use in estimating the normal distribution by normit analysis"	285
G. D. Berndt	74	"Power functions of the gamma distribution"	385
I. D. J. Bross & E. L. Kasten	45	"Rapid analysis of 2 x 2 tables"	286
E. D. Cashwell & C. J. Everett	62	*A Practical Manual on the Monte Carlo Method for Random Walk Problems*	299
Herman Chernoff & Lincoln E. Moses	75	*Elementary Decision Theory*	385
F. E. Clark	46	"Truncation to meet requirements on means"	286
W. H. Clatworthy	47	*Contributions on Partially Balanced Incomplete Block Designs with Two Associate Classes*	287
W. J. Dixon	48	"Estimates of the mean and standard deviation of a normal population"	287
H. F. Dodge & H. G. Romig	49	*Sampling Inspection Tables*	288
R. Doornbos & H. J. Prins	76	"On slippage tests. I"	386
Charles W. Dunnett	6	"Tables of the bivariate normal distribution with correlation $1/\sqrt{2}$"	79
C. W. Dunnett & R. A. Lamm	50	"Some tables of the multivariate normal probability integral with correlation coefficients 1/3"	290
E. C. Fieller, H. O. Hartley & E. S. Pearson	51	"Tests for rank correlation coefficients. I"	291
F. G. Foster	77	"Upper percentage points of the generalized beta distribution. III"	386
W. Hetz & H. Klinger	78	"Untersuchungen zur Frage der Verteilung von Objekten auf Plätze"	386
G. Horsnell	52	"Economical acceptance sampling schemes"	291
A. Huitson	79	"Further critical values for the sum of two variances"	387
N. L. Johnson	53	"Optimal sampling for quota fulfillment"	292
Solomon Kullback	80	*Information Theory and Statistics*	387
E. L. Lehmann	31	*Testing Statistical Hypotheses*	207
G. J. Lieberman	81	"Tables for one-sided statistical tolerance limits"	388
P. G. Moore	54	"The two-sample t-test based on range"	292
P. A. P. Moran	92	*The Theory of Storage*	393
NBS, Applied Math. Series, No. 50	55	*Tables of the Bivariate Normal Distribution Function and Related Functions*	293
E. Nievergelt	56	"Die Rangkorrelation U"	295
D. B. Owen	82	*Tables of Factors for One-sided Tolerance Limits for a Normal Distribution*	388
D. B. Owen & D. T. Monk	57	*Tables of the Normal Probability Integral*	295
K. V. Ramachandran	83	"On the Studentized smallest chi-square"	389
A. E. Sarhan & B. G. Greenberg	58	"Tables for best linear estimates by order statistics of parameters of single exponential distributions from singly and doubly censored samples".	297

Author/s	Review Number	Title	Page
A. E. Sarhan & B. G. Greenberg	84	"Estimation of location and scale parameters by order statistics from singly and doubly censored samples. Part II"	389
Y. S. Sathe & A. R. Kamat	59	"Approximations to the distributions of some measures of dispersion based on successive differences"	297
C. C. Sekar, S. P. Agarwala & P. N. Chakraborty	60	"On the power function of a test of significance for the difference between two proportions"	298
J. M. Sengupta & Nikhilesh Bhattacharya	85	"Tables of random normal deviates"	390
B. Sherman	61	"Percentiles of the w_n statistic"	299
Minoru Siotani	86	"Note on the utilization of the generalized Student ratio in analysis of variance or dispersion"	390
Minoru Siotani & Masaru Ozawa	87	"Tables for testing the homogeneity of k independent binomial experiments on a certain event based on the range"	391
P. N. Somerville	88	"Tables for obtaining non-parametric tolerance limits"	391
G. P. Steck	89	"A table for computing trivariate normal probabilities"	391
G. Taguti	90	"Tables of tolerance coefficients for normal populatons"	392
R. F. Tate & R. L. Goan	91	"Minimum variance unbiased estimation for the truncated Poisson distribution"	393
A. H. Wapstra, G. J. Nijgh & R. van Lieshout	1	*Nuclear Spectroscopy Tables*	75

L. Higher Mathematical Functions

Centre National D'Études des Télécommunications	63	*Tables numériques des fonctions associées de Legendre.*	300
E. A. Čistova	7	*Tables of Bessel functions of real argument and of integrals involving them*	79
Otto Emersleben	8	"Werte einer Zetafunktion zweiter Ordnung mit Argument $s = 2$"	80
L. K. Frevel, J. W. Turley & D. R. Petersen	2	*Seven-Place Table of Iterated Sine*	76
W. W. Gerbes, G. E. Reynolds, M. R. Hoes & C. J. Drane, Jr.	11	*Table of $S(x)$ and its First Eleven Derivatives*	82
R. Hensman & D. P. Jenkins	12	*Tables of* $\frac{2}{\sqrt{\pi}} e^{z^2} \int_z^\infty e^{-t^2} dt$ *for Complex z*	83
A. V. Hershey	13	*Computing Programs for the Complex Exponential Integral*	83
L. N. Karmazina & Ê. A. Čistova	32	*Tables of Bessel functions of imaginary argument and of integrals involving them*	208
K. A. Karpov	14	*Tables of the function* $F(z) = \int_0^z e^{x^2} dx$ *in the complex domain*	84

Author/s	Review Number	Title	Page
HERMAN H. LOWELL	9	*Tables of the Bessel-Kelvin Functions Ber, Bei, Ker, Kei, and their Derivatives for the Argument Range 0(0.01)107.50*	81
Y. NOMURA & S. KATSURA	15	"Diffraction of electric waves by circular plate and circular hole"	84
NUMERICAL COMPUTATION BUREAU, REPORT NO. 11	10	*Tables of Whittaker Functions (Wave Functions in Coulomb Field) Part 2*	81
F. A. PAXTON & J. E. ROLLIN	33	*Tables of the Incomplete Elliptic Integrals of the First and Third Kind*	209
LOUIS ROBIN	64	*Fonctions sphérique de Legendre et fonctions sphéroidales*	301
I. M. RYSHIK & I. S. GRADSTEIN	69	*Summen-, Produkt- und Integral-Tafeln: Tables of Series, Products, and Integrals*	381
R. G. SELFRIDGE & J. E. MAXFIELD	65	*A Table of the Incomplete Elliptic Integral of the Third Kind*	302
		M. Integrals	
H. J. GAWLIK	4	*Zeros of Legendre Polynomials of orders 2-64 and weight coefficients of Gauss quadrature formulae*	77
W. W. GERBES, G. E. REYNOLDS, M. R. HOES & C. J. DRANE, JR.	11	*Table of $S(x)$ and its First Eleven Derivatives*	82
R. HENSMAN & D. P. JENKINS	12	*Tables of $\frac{2}{\sqrt{\pi}} e^{z^2} \int_z^\infty e^{-t^2}\, dt$ for Complex z*	83
A. V. HERSHEY	13	*Computing Programs for the Complex Exponential Integral*	83
JAKOB HORN & HANS WITTICH	93	*Gewöhnliche Differentialgleichungen*	394
K. A. KARPOV	14	*Tables of the function $F(z) = \int_0^z e^{x^2}\, dx$ in the complex domain*	84
Y. NOMURA & S. KATSURA	15	"Diffraction of electric waves by circular plate and circular hole"	84
I. M. RYSHIK & I. S. GRADSTEIN	69	*Summen-, Produkt- und Integral-Tafeln: Tables of Series, Products, and Integrals*	381
R. G. SELFRIDGE & J. E. MAXFIELD	65	*A Table of the Incomplete Elliptic Integral of the Third Kind*	302
		P. Engineering	
ARMOUR RESEARCH FOUNDATION	34	*Proceedings of the Fourth Annual Computer Applications Symposium*, 1957	210
CHARLES J. THORNE	16	*Temperature Tables: Part 1. One-Layer Plate, One-Space Variable, Linear*	85
P. A. P. MORAN	92	*The Theory of Storage*	393
		Q. Astronomy	
GARRETT BIRKHOFF & R. E. LANGER, Editors	94	*Proceedings of Symposia in Applied Mathematics*, Vol. IX, "Orbit Theory"	395
		S. Physics, Geophysics, Crystallography	
VAL J. ASHBY & HENRY C. CATRON	35	*Tables of Nuclear Reaction Q Values*	211

G. A. Bartholomew & L. A. Higgs	17	*Compilation of Thermal Neutron Capture Gamma Rays*	86
Garrett Birkhoff & R. E. Langer, Editors	94	*Proceedings of Symposia in Applied Mathematics*, Vol. IX, "Orbit Theory"	395
D. R. Hartree	66	*The Calculation of Atomic Structures*	304
James Miller, John M. Gerhauser & F. A. Matsen	36	*Quantum Chemistry Integrals and Tables*	211
Y. Nomura & S. Katsura	15	"Diffraction of electric waves by circular plate and circular hole"	84
M. E. Rose	18	*Internal Conversion Coefficients*	87
A. H. Wapstra, G. J. Nijgh & R. van Lieshout	1	*Nuclear Spectroscopy Tables*	75
C. H. Westcott	19	*Effective Cross Section Values for Well-Moderated Thermal Reactor Spectra*	87

T. Chemistry

Alvin Glassner	20	*The Thermochemical Properties of the Oxides, Fluorides, and Chlorides to 2,500° K*	88
James Miller, John M. Gerhauser & F. A. Matsen	36	*Quantum Chemistry Integrals and Tables*	211

W. Economics and Social Sciences

Armour Research Foundation	34	*Proceedings of the Fourth Annual Computer Applications Symposium*, 1957	210
Kenneth J. Arrow, Samuel Karlin & Herbert Scarf	21	*Studies in the Mathematical Theory of Inventory and Production*	89
Robert O. Ferguson & Lauren F. Sargent	67	*Linear Programming*	305
Daniel D. McCracken, Harold Weiss & Tsai-Hwa Lee	22	*Programming Business Computers*	89

X. Numerical Analysis and Applied Mathematics

Kurt Arbenz	68	"Integralgleichungen für einige Randwertprobleme für Gebiete mit Ecken"	307
E. D. Cashwell & C. J. Everett	62	*A Practical Manual on the Monte Carlo Method for Random Walk Problems*	299
L. Ivan Epstein	37	*Nomography*	212
Robert O. Ferguson & Lauren F. Sargent	67	*Linear Programming*	305
F. R. Gantmacher	43	*Applications of the Theory of Matrices*	284
J. N. Goodier & P. G. Hodge, Jr.	23	*Elasticity and Plasticity*	89
Jakob Horn & Hans Wittich	93	*Gewöhnliche Differentialgleichungen*	394
L. V. Kantorovich & V. I. Krylov	24	*Approximate Methods of Higher Analysis*	90
Lyle R. Langdon	39	*Approximating Functions for Digital Computers*	214
Rudolph E. Langer, Editor	95	*Boundary Problems in Differential Equations*	395
Alexander S. Levens	38	*Nomography*	213

Walter L. Wilson, Jr.	96	"Operators for solution of discrete Dirichlet and Plateau problems over a regular triangular grid"	308

Z. Calculating Machines and Mechanical Computations

Franz L. Alt	25	*Electronic Digital Computers*	91
E. D. Cashwell & C. J. Everett	62	*A Practical Manual on the Monte Carlo Method for Random Walk Problems*	299
James T. Culbertson	26	*Mathematics and Logic for Digital Devices*	93
Jack Bonnell Dennis	97	*Mathematical Programming and Electrical Networks*	398
Dept. of the Army	27	*Catalog of Commercially Available Automatic Data Processing Systems*	94
H. Freudenthal	40	"Logique Mathématique Appliquée"	216
Martin Gardner	28	*Logic Machines and Diagrams*	95
Joachim Jeenel	41	*Programming for Digital Computers*	217
Lyle R. Langdon	39	*Approximating Functions for Digital Computers*	214
Daniel D. McCracken, Harold Weiss & Tsai-Hwa Lee	22	*Programming Business Computers*	89

Compiled by
Elizabeth Harper
Applied Mathematics Laboratory
David Taylor Model Basin
Washington 7, District of Columbia

398

91
209

93
398

94

216
95
217
214
89

ia